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10/630,897	07/31/2003	John L. Waddell JR.	WADDELL I	9607
1444 7590 07/25/2007 BROWDY AND NEIMARK, P.L.L.C. 624 NINTH STREET, NW SUITE 300 WASHINGTON, DC 20001-5303			EXAMINER JOHNSON, STEPHEN	
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

**MAILED**

Application Number: 10/630,897  
Filing Date: July 31, 2003  
Appellant(s): WADDELL ET AL.

**JUL 25 2007**

**GROUP 3600**

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Anne M. Kornbau  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed March 30, 2007 appealing from the Office action mailed 4/4/2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

The following is a listing of the evidence (e.g., patents, publications, Official Notice, and admitted prior art) relied upon in the rejection of claims under appeal.

US 4,184,788	Colle	01/22/1980
US 4,700,706	Munch	10/20/1987

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US 2,602,302	Poux	07/08/1952
US 3,795,994	Ava	03/12/1974
US 4,716,598	Bertram	01/05/1988
US 5,309,690	Symons	05/10/1994

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

- A) Claims 13 and 17-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Colle (788).

Colle (788) discloses an assembly comprising:

- |  |                       |
|--|-----------------------|
| a) a first film of a flexible resin material;  | 54; col. 4, lines 3-8 |
| b) a second film of a flexible resin material; | 53; col. 4, lines 3-8 |
| c) pockets;                                    | see figs. 1, 2        |
| d) a plurality of seams; and                   | 57                    |
| e) a shock wave attenuating material.          | col. 4, lines 23-42   |

- B) Claims 13 and 17-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Munch (706) in view of Colle (788).

Munch (706) discloses an assembly comprising:

- |  |                     |
|--|---------------------|
| a) a first film of a flexible material;  | 5                   |
| b) a second film of a flexible material; | 3                   |
| c) pockets;                              | see figs. 1-3       |
| d) a plurality of seams; and             | col. 3, lines 17-26 |
| e) a shock wave attenuating material.    | col. 3, lines 40-67 |

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Munch (706) applies as recited above. However, undisclosed are flexible film member materials that are a polyamide resin. Colle (788) teaches flexible film member materials that are a polyamide resin (col. 4, line 4). Applicant is substituting one type of flexible film material for another in an analogous art setting as explicitly encouraged by both the primary and secondary references (see col. 1, lines 8-10 of Munch; and col. 4, lines 3-8 of Colle). It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Colle to the Munch assembly and have an assembly with flexible film members of a particular type of material.

C) Claims 13 and 17-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Poux (302).

Poux (302) discloses an assembly comprising:

- a) a first film of a flexible polyamide resin material; 10 or 7
- b) a second film of a flexible polyamide resin material; 11 or 8
- c) pockets; see figs. 6, 7, 8
- d) a plurality of seams; and 6; col. 3, lines 40-57
- e) a shock wave attenuating material. col. 4, line 7

D) Claims 13, 17, and 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Ava (994).

Ava (994) discloses an assembly comprising:

- a) a first film of a flexible resin material; 1; col. 1, lines 18-23
- b) a second film of a flexible resin material; 2; col. 1, lines 18-23
- c) pockets; see figs. 1-6

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- d) a plurality of seams; and 4, 5, 6, 7
- e) a shock wave attenuating material. col. 2, lines 16-18

E) Claims 13, 17-18, 20, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Bertram (598).

Bertram (598) discloses an assembly comprising:

- a) a first film of a flexible polyamide resin material; 17; col. 2, lines 46-47
- b) a second film of a flexible polyamide resin material; 19; col. 2, lines 46-47
- c) pockets; see figs. 1-2
- d) a plurality of seams; and 3
- e) a shock wave attenuating material. 21; col. 2, line 48

F) Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bertram (598) in view of Symons (690).

Bertram (598) applies as recited above. However, undisclosed is a shock wave attenuating material that is perlite. Applicant is substituting one enclosed aggregate material for another in an analogous art setting as explicitly encouraged by both the secondary reference (see col. 5, lines 12-20 of Symons) and the primary reference (see col. 1, line 48 and col. 2, line 48 of Bertram). It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Symons to the Bertram assembly and have an assembly with a different type of enclosed aggregate material.

#### **(10) Response to Argument**

(A) Applicant's arguments are addressed as follows with regard to the rejection under 35 U.S.C. 102(b) as being anticipated by Colle (788).

It is argued that the Colle filler material is hard in nature and not flowable as claimed because the cementitious slurries can harden when disposed under a body of water. In response, when the cementitious slurries are not disposed under a body of water clearly they are not hardened and are a flowable slurry.

It is further argued that the Colle reference is directed to erosion control and is not the same as usage as a shock-attenuating material. In response, please note that the claim limitation directed to “A shock-attenuating assembly” is only directed to the claim title and as such is not limiting. Further, the Colle assembly would inherently attenuate shock even if it is not specifically designed to do so. Note that the claims are article claims and not method claims and as such there is no requirement that the article be used for the same reason that applicant’s article or shock-attenuating assembly is used.

It is further argued that the asphalt would not be flowable at ambient temperature because the melting point of asphalts is 54 degrees to 173 degrees centigrade. In response, the melting point of an asphalt is not at all the same thing as the temperature as which the asphalt is flowable. Further, since the reference specifically states “commercially available flowable asphalts” (col. 4, lines 40-42), one must conclude that the asphalt is flowable as explicitly stated.

With regard to the claim limitation directed to “mechanical properties and flow properties of a fluid”, note that what is actually claimed is “a shock wave attenuating material having the flow properties of a liquid”. The cementitious slurries and flowable asphalt of Colle (col. 4, lines 40-42) meet this claim limitation. With regard to the issue of shock wave attenuating and attenuation of shock waves associated with explosive blasts, clearly cementitious slurries and flowable asphalts would function to do this and in all probability better than an equivalent

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structure filled with perlite as disclosed by applicant. Applicant argues that blast attenuating material that are aqueous in nature have certain disadvantages. While this may be the case, this does not mean that they cannot be used in blast attenuating. Rather, such a statement is a concession that material of an aqueous nature are known to be used in blast attenuation even though there may be disadvantages associated with their usage.

Applicant argues that the preamble of the claim claims "A shock-attenuating assembly". This is not an accurate statement. The title of the claim claims "A shock-attenuating assembly" and as such arguments directed to incorporating limitations in the preamble of the claim into the claim body cannot be convincing. Further, since the materials disclosed in Colle must inherently perform the function of shock attenuation even if not specifically designed to do so, this claim limitations is also met on the grounds of inherency.

Further, with regard to the issue of the flowable nature of the cementitious slurries and flowable asphalt material, please note that the structure as illustrated in fig. 1 is filled by inserting the flowable material via nozzle 67 (col. 6, lines 38-43). Consequently, the structure as illustrated in fig. 1 cannot be filled and therefor would be non-functional if the material is not flowable at some time. Note that the prior art (Colle) is available for all that is taught within the four corners of the reference and that at least in some of the embodiments and at some time in other of the embodiments the material is and in fact must be flowable. Applicant cannot just compare his claims to whatever portions or embodiments of Colle he believes his claims read over and ignore the rest of the teachings of Colle.

(B) Applicant's arguments are addressed as follows with regard to the rejection under 35 U.S.C. 103(a) as being unpatentable over Munch (706) in view of Colle (788).



It is argued that the material of Munch (water, glycol, salt, and finely dispersed silicic acid) is not flowable. In response, certainly a material that is predominantly composed of salt water and antifreeze is flowable at room temperature. Further, Munch specifically states the flowable nature of his material and the ability of the material to be shaped at a range of temperatures (see col. 3, lines 40-58).

With regard to the issue of shock attenuation and the Munch reference, note that this claim limitation is only present in the title of the claim language. If the claim limitation is not listed in either the body of the claim or the preamble, it cannot be considered to be limiting to the claim language. Further, a structure including a container that is flexible and includes contained flowable material as disclosed in Munch is and must inherently act to attenuate shock waves even if this is not the intended usage of the Munch device.

With regard to the issue of which claims the secondary reference Colle applies to, note that the teaching of the material type of flexible film member materials or flexible pockets is directed to all claims because claim 13 recites a “flexible resin material” and claim 22 recites a “polyamide resin material”.

(C) Applicant’s arguments are addressed as follows with regard to the rejection under 35 U.S.C. 102(b) as being anticipated by Poux (302).

It is argued that when the pack is frozen it does not act as a flowable material. This is accurate. However, when it is not frozen and note that the intended usage of the device is to vary between frozen and liquid or flowable form (see col. 3, lines 7-23), the water inside is clearly flowable.

With regard to the issue of shock attenuation and the Poux reference, note that this claim limitation is only present in the title of the claim language. It is not present in the preamble as argued. If the claim limitation is not listed in either the body of the claim or the preamble, it cannot be considered to be limiting to the claim language. Further, a structure including a container that is flexible and includes contained flowable material as disclosed in Poux is and must inherently act to attenuate shock waves even if this is not the intended usage of the Poux device.

(D) Applicant's arguments are addressed as follows with regard to the rejection under 35 U.S.C. 102(b) as being anticipated by Ava (994).

It is argued that the shock attenuating material cannot be air. In response, please note the title of Ava that specifically recites "AIR-CUSHION SOCKS". Consequently, air can and is used as a shock absorbing material. Note that if the air were removed and replaced by a vacuum the Ava device would not act as a shock absorbing device as is the intended usage of the device.

With regard to the claim limitation directed "a flexible shock attenuating assembly", once again this is only listed in the title of the claim. Further, note that the intended purpose of Ava is for shock absorbing or shock attenuation and that the materials of Ava are selected to act in such a way to fulfill this purpose.

(E) Applicant's arguments are addressed as follows with regard to the rejection under 35 U.S.C. 102(b) as being anticipated by Bertram (598).

It is argued that polyester beads cannot be considered to be shock-absorbing material. In response, Bertram teaches polyester or polystyrene beads (col. 1, line 48, and col. 2, line 48). These materials are inherently shock-absorbing in nature not only do to the fact that they move

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relative to each other or are flowable as are the perlite beads disclosed by applicant but also because of the inherent collapsible nature of the bead material. Just because the bead material is also useful as a heat insulator does not remove them from having other functions as well (see col. 2, lines 3-9).

(F) Applicant's arguments are addressed as follows with regard to the rejection under 35 USC 103(a) as being unpatentable over Bertram (598) in view of Symons (690).

With regard to the issue of Bertram teaching a shock wave attenuating material, the material of Bertram inherently acts as such as argued in paragraph (E) above. Applicant further argues that the material taught by Symons is also not shock absorbing but are only used as insulators and in fire-proofing. This argument is a little difficult to understand. Note that one of the materials taught by Symons is perlite (see col. 5, lines 12-20 of Symons). It is not understood as to how perlite can act as a shock absorbing material in applicant's disclosed embodiment but not act as a shock absorbing material when cited in the applied art (Symons).

It is further argued that the core material of Symons is intended for heat and sound insulation and that the material of Symons releases water at elevated temperatures. In response, this is not the issue. The rejection only applies to substituting one material type for another as explicitly encouraged by both references. Clearly the perlite after substituted would still have the same properties as the perlite material before substitution and as disclosed as applicant's flowable material.

It is argued that there is no motivation to combine these references. In response, the motivation to combine has already been given in the initial rejection (col. 1, line 48; and col. 2, line 48 of Bertram; and col. 5, lines 12-20 of Symons). It is further argued that such a

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substitution would result in a jacket filled with a cellular core sandwiched between two layers of jacket and that such a material releases water at elevated temperatures. In response, this is not an accurate assessment of what is being substituted. All that is intended to be substituted is to change the material type of the polyester beads of Bertram to be a different material type of bead being perlite. Nothing else is being substituted and consequently none of these other issues raised by applicant are either accurate or relevant to the substitution.

With regard to the issue of long-felt need as listed in the affidavit of James Gordon, this has been considered but is not considered of such weight as to override the explicit motivation to combine as taught by Bertram in view of Symons.

With regard to the argument that none of the references suggest assemblies that are used for blast protection. Although this argument has already been addressed, note once again that this argument is only directed to the title of the claim and as such is not limiting and that the references would inherently perform this function for the reasons already given above (paragraphs A-F of arguments section). With regard to the issue of the claims being construed in light of the specification, it is also well known that the claims should be given the broadest reasonable interpretation as would be given by one of ordinary skill in the art.

It is also argued that the examiner has not disclosed a single reference that discloses an invention having the a flexible material that can wrap around any shaped structure; comprised of first and second films of flexible materials that are optionally water-impermeable; that have a plurality of seams forming pockets; and wherein the pockets are filled with a shock wave attenuating material having flow properties of a liquid. In response, please see sections (A-F) of

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the Grounds for Rejection section that explicitly listed where each of these items are present in each of the references.

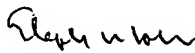
**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Stephen M. Johnson



Primary Examiner

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